

Alexandra Szewc

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EDUCATION

Johns Hopkins University — Biomedical Engineering Program

AUGUST 2019 - MAY 2023

GPA - 3.88

Pursuing BS in Biomedical Engineering and Computer Science programs with a focus on Data Science. Relevant coursework includes Probability and Statistics, Organic Chemistry,

The Academy for Mathematics, Science, and Engineering

SEPTEMBER 2015 - JUNE 2019

(overall weighted) GPA - 103.02

Excelled at a rigorous, highly selective program for students with career interests in engineering. Students participate in technical internships with industry partners.

RESEARCH EXPERIENCE

Computational Intensive Care Medicine Lab — Student Researcher

SEPTEMBER 2020 - PRESENT

Lead a research initiative aimed at using big data to create a real-time, predictive model for extubation failure in the intensive care unit environment.

Novartis Pharmaceutical Corp. — Intern

JULY 2018 - JUNE 2019

Contributed to clinical toxicity lab work by managing sample slides, sealing paraffin wax block samples, and staining slides.

Tara Innovations LLC — Intern

JULY 2018 - JUNE 2019

Studied properties of emulsions in the context of pharmaceutical research; applied knowledge to the development of transcutol ointment in oil medium resulting in my own research initiative later on.

Independent Research — Biofuel Production

SEPTEMBER 2018 - JUNE 2019

Spearheaded research regarding the enzymatic hydrolysis of cellulosic biomass with a focus on enzymatic synergy and green chemistry principles for biofuel production.

LEADERSHIP EXPERIENCE AND COMMUNITY IMPACT

JHU Computer Science Department — Course Assistant

SEPTEMBER 2020 - PRESENT

Mentor students in programming courses. Responsible for grading assignments, debugging submissions, and providing assistance in live lectures and office hours.

The Women's Network — Executive Board Member

JANUARY 2021 - PRESENT

Responsible for developing, designing and curating the blog website, overseeing a team of TWN blog writers, assessing article topics, revising and publishing content.

Full Stack Web Development — Developer

JUNE 2020 - PRESENT

Design and develop functional and visually appealing websites and apps front to back. Worked for personal and professional purposes of several business entities.

Hackettstown Hospital — Volunteer

FALL 2015 - WINTER 2019

Became an integral part of the dynamic hospital environment by managing sample specimen delivery, reception services, volunteer training, and patient discharges.

Student Athlete Advisory Committee — Representative

Represent the NCAA fencing team as a member of the Programming Committee. Oversee team events and gain leadership experience by enhancing participation.

AWARDS

NIH DEBUT Challenge HIV Prize received grant for winning research submission.

NCWIT Aspirations in Computing Collegiate Award Finalist awarded for collaboration in a high-impact, computationally intensive project.

Dean's List distinction for academic excellence for all semesters of attendance to date.

SKILLS SUMMARY

Strong leadership, project management, and presentation skills.

Dedicated team member; excellent interpersonal skills.

Curious; enjoy creative problem solving.

Experienced in organic chemistry, sterile technique, cell culturing, data analysis.

Skilled in JAVA, JS, HTML, CSS, PHP, SQL, C, C++, Bash, R, Python, ImageJ, Matlab, Visual Basic, Microsoft Office, Autodesk, Solidworks, 3D printing.

Fluent in Polish and Spanish; proficient in French.